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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,428	03/12/2004	Michael T. Rowan	68865.001007	8147
21967 7590 03/17/2009 HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT 1900 K STREET, N.W. SUITE 1200 WASHINGTON, DC 20006-1109				
EXAMINER				
GU, SHAWN X				
ART UNIT		PAPER NUMBER		
2189				
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03/17/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/799,428

Applicant(s)

ROWAN ET AL.

Examiner

Shawn X. Gu

Art Unit

2189

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-44, 46, 48-50, 52, 54 and 55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-44, 46, 48-50, 52, 54 and 55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/24/2008
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This final Office action is in response to the amendment filed on 21 November 2008. Claims 26-44, 46, 48-50, 52, 54 and 55 are pending. Claim 42 is cancelled. All objections and rejections not repeated below are withdrawn. No prior art rejection is made because prior art search did not produce any relevant results in view of the 112 rejections below and the interpretations used for examining purposes. Claims 44 and 50 have been amended to include previously indicated allowable subject matter, and no prior art was found that reads over claim 26 as amended. The most closely related prior art to claim 26 is the Wu et al. [US 6,981,114 B1] reference cited previously, as it teaches a log 260 and a snapshot storage 240 which anticipate the first and the second data in claim 26. The determining step is taught by Wu's snapshot reconstruction process which makes a determination of whether to retrieve data from the log 260 or the snapshot storage 240 to recreate a snapshot. However, claim 26 now includes the "may have been" and "identifying a second time ... if the first data store did not contain the first data at the first time" features which are not anticipated by Wu or any other known prior art.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 24 November 2008 is in compliance with the provisions of 37 CFR 1.97 except for items 83, 84, 85, 86, 87, 88

and 90, which are entries for non-patent literatures that do not include the corresponding publication months (see MPEP 609.04(a)). Accordingly, the information disclosure statements except items 83, 84, 85, 86, 87, 88 and 90 are being considered by the examiner.

Specification

3. The Applicant is reminded that any change in the status of the parent application 10/668,833 needs to be updated in paragraph [0001] of the instant application's specification.

Claim Objections

4. Claims 27, 28, 30, 31, and 42 are objected to because of the following informalities:

Per claim 27, on line 4, "the data" lacks sufficient antecedent basis. It would be more appropriate to change "the" to "a", or delete "the".

Per claim 27, on line 5, "a second time" should be changed to "the second time" because claim 26 already recites "a second time" on its third line from the bottom.

Per claim 28, on line 4, "the data" lacks sufficient antecedent basis. It would be more appropriate to change "the" to "a", or delete "the".

Per claim 30, on line 2, it would be more appropriate to replace "the same logical device" with "a same logical device".

Per claim 42, on line 3, it would be more appropriate to add "the" before "first data" because claim 26 already recites "the first data".

All dependent claims are objected to for having the same deficiencies contained in the claims they are dependent from. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 44, 46, 48-50, 52, 54 and 55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Per claim 44, lines 3-5 recites a step of "respond to data requests with data that may have been present in the data store at a first time in the past" in a method for identifying a time at which a data store was corrupted. This suggests that the requested data may not be in the data store at the first time in the past. The specification describes this method for identifying a time of corruption for a data store in paragraphs [0034], [0035], [0099], [00116]-[00119], and none of these paragraphs teaches responding to data requests with data that *may have been present* in the data store at a first time in the past. Instead, it appears that the method only responds to data requests

with data that was positively present in the data store at a first time in the past or any other requested point in time in the past.

Per claim 50, lines 4-6 recites a step of “respond to data requests with data that may have been present in the data store at a first time in the past”. This suggests that the requested data may not be in the data store at the first time in the past. The specification describes this method for identifying a time of corruption for a data store in paragraphs [0034], [0035], [0099], [00116]-[00119], and none of these paragraphs teaches responding to data requests with data that *may have been present* in the data store at a first time in the past. Instead, it appears that the method only responds to data requests with data that was positively present in the data store at a first time in the past or any other requested point in time in the past.

All dependent claims are objected to for having the same deficiencies contained in the claims they are dependent from. Appropriate correction is required.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 26-44, 46, 48-50, 52, 54 and 55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Per claim 26, on line 6, the original limitation “the first data store” has been amended as “a first data store”. However, line 2 already recites “a first data store”, and

it is unclear whether the Applicant intended the first data store on line 2 to be a different first data store than the one recited on line 2.

Per claim 44, the claim recites "a data store" on line 2 and again on line 3. It is unclear whether they are the same or different data stores. It also renders the limitation "the data store" on lines 5-10 and 13-15 indefinite because it is unclear which one of the "a data store" is referred to by "the data store". Furthermore, because lines 3-5 recites "configuring a data store to respond to data requests with data that *may have been present* in the data store at a first time in the past", and claim 26 as well as the specification teach "a second data store respond to data requests with first data that may have been stored in a first data store at a first time in the past", it supports the assumption that there may be two different data stores in the instant claim, with one data store supplying data that was not present in the other data store at a first time in the past. If there is only one data store in the instant claim, then the Applicant should amend the claim accordingly while pointing out its support in the written description in the next response to Office action. Furthermore, because "may have been present" is now recited in the claim, then under the broadest interpretation the data may not be present in the data store at a first time in the past. In this scenario, steps (c) and (d) become indefinite because there can be no "receiving" and "determining from the received data" if there is no data present to begin with. Also note that the limitation "the request" on lines 7-8 is indefinite because line 3 recites "data requests" and line 6 recites "requesting data".

Per claim 50, the claim recites "a data store" on line 2 and again on line 4. It is unclear whether they are the same or different data stores. It also renders the limitation "the data store" on lines 6-8, 9, 11 and 14-17 indefinite because it is unclear which one of the "a data store" is referred to by "the data store". Furthermore, because lines 4-6 recites "configuring a data store to respond to data requests with data that *may have been present* in the data store at a first time in the past", and claim 26 as well as the specification teach "a second data store respond to data requests with first data that may have been stored in a first data store at a first time in the past", it supports the assumption that there may be two different data stores in the instant claim, with one data store supplying data that was not present in the other data store at a first time in the past. If there is only one data store in the instant claim, then the Applicant should amend the claim accordingly while pointing out its support in the written description in the next response to Office action. Furthermore, because "may have been present" is now recited in the claim, then under the broadest interpretation the data may not be present in the data store at a first time in the past. In this scenario, steps (c) and (d) become indefinite because there can be no "receiving" and "determining from the received data" if there is no data present to begin with. Also note that the limitation "the request" on lines 8-9 is indefinite because line 4 recites "data requests" and line 7 recites "requesting data".

Per claims 48, 49, 54 and 55, the claims are rendered indefinite by the limitation "the data store" contained in each claims for the same reason set forth above for claims 44 and 50.

All dependent claims are objected to for having the same deficiencies contained in the claims they are dependent from. Appropriate correction is required.

Response to Arguments

9. Applicant's arguments with respect to claims 26-44, 46, 48-50, 52, 54 and 55 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn Gu whose telephone number is (571) 272-0703. The examiner can normally be reached on 9am-5pm, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon can be reached on (571) 272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/SHAWN GU/

Shawn X Gu
Patent Examiner
Art Unit 2189

11 March 2009

/Reginald G. Bragdon/
Supervisory Patent Examiner, Art Unit 2189